Communication, Education, and Collaboration

Educating and communicating go together—spreading the word about immunization helps educate the public, healthcare professionals, and all those involved in immunization efforts. NIP responds to requests from the public, the media, and healthcare professionals for information about vaccines and immunization. NIP also provides immunization education through course work, conferences, and information campaigns, and investigates the best way to reach its target audiences. Finally, NIP coordinates its communication and education activities with private and public sector partners.

Communicating about Vaccines and Immunization

Responding to the Media

Each year NIP receives thousands of phone calls and e-mails from members of the media. Reporters seek information about the latest immunization recommendations, vaccine-related research, or the number of adults and children receiving a specific vaccine. In response to these requests, NIP activities include

- Posting the latest immunization-related information on the NIP website
- Releasing program updates and scientific announcements in the CDC Morbidity and Mortality Weekly Report (MMWR)
- Offering scientific and medical expertise for press conferences, briefings, and interviews
- Summarizing immunization recommendations, scientific findings, and immunization issues for quick reference

Communications Research

National Primary Care Physician Survey

To help physicians answer parents' questions and concerns about immunization, NIP is conducting a three-year survey of pediatricians and family physicians. This study, carried out by the Gallup

Organization, identifies the questions parents ask about immunization and tracks how physicians answer these questions. In 2004, the second year of the study, researchers gathered data on vaccination attitudes and practices from 430 pediatricians and family physicians and their patients. Survey results will be used to analyze short-term childhood vaccination trends and to develop communication and educational materials for physicians and parents.

Patient Encounter Survey

Data about patient encounters is collected annually by the Gallup Organization from a representative sample of providers and parents. Participants answer a series of questions about their attitudes, beliefs, practices, and concerns in relation to childhood vaccination. Researchers collect data about which vaccines are given late or missed and why. This study uncovered significant differences in perceptions of vaccines issues; parents and physicians view them very differently. Results of the survey were initially presented at the 2004 National Immunization Conference, and analytical articles are in preparation.

Qualitative Communication Research

In June 2004, 10 focus groups were conducted with African American, Hispanic, and Caucasian parents of 6–23 month-old children to explore parents' knowledge and attitudes about influenza disease and vaccination. The research indicated that

- Participants understood that the flu can be more serious for children than for adults.
- Parents understand the importance of the immunization schedule for children and were committed to the schedule—which does not include the flu shot.
- Participants who favor the flu shot are influenced by the recommendation of their child's pediatrician. Participants who oppose the flu shot believe it causes flu or flu-like symptoms.
- Pediatricians and family practitioners play a significant role in educating parents about the importance of the flu shot.

Technical Assistance for Healthcare Professionals and the General Public

Call Center — National Immunization Information Hotline (NIIH)

Both the general public and healthcare professionals frequently request immunization information and referral services from the National Immunization Information Hotline (NIIH). Trained specialists are available Monday through Friday, 8:00 a.m. to 11:00 p.m. ET, to offer up-to-date immunization information and provide referrals for immunization resources such as clinics, local and state programs, and pharmaceutical companies. In 2004, NIP contracted with the American Social Health Association to provide this toll-free service in both English and Spanish. To accommodate the hearing impaired, NIIH offers Tele-Typewriter (TTY) service as part of the hotline service.

NIIH success is reflected in the large volume of calls answered and publications distributed. Callers included parents, public health professionals, students, physicians, nurses, and pharmacists. In 2004, hotline staff answered approximately 127,000 calls, 10,000 more calls than were answered in 2003 and far more than NIP staff members alone could answer. Demand for hotline responses peaked in October 2004, with a surge in calls for information about influenza vaccine and the vaccine shortage. During October, hotline staff answered almost 40,000 calls, 5 times the monthly average, and operation of the hotline was expanded to 24 hours a day, 7 days a week.

Effective March 15, 2005, call center service is available through 1-800-CDC-INFO (1-800-232-4646).

Website for technical assistance: http://www.vaccines.ashastd.org/

E-mail — NIPINFO@cdc.gov

In 1995, the NIPINFO e-mail service was initiated to answer immunization questions from doctors, nurses, and other healthcare providers; today, the service is used by parents and the public as well as healthcare professionals. Most questions are answered within 24 hours. The annual volume of messages has increased from 2,084 in 1998 to approximately 9,300 in 2004, more than 35 a day. In October 2004, volume of inquiries was especially high when, in response to the influenza vaccine shortage, NIP staff responded to 1,314 e-mails, 40% more than the 2004 monthly average.

NIP Website — www.cdc.gov/nip

In 2004, the NIP website continued to be upgraded and enhanced, and new ways to tap the potential for this powerful medium were explored. Notable additions and activities include

- "Listening" on the Internet. More and more, the NIP website is used by its public audience to send comments and suggestions about immunization policies. Online surveys and the "Contact Us" link are used to gather information about response to applications, news, and information on the website.
- Personalized Childhood Vaccine Schedule. One of the most popular additions to the NIP website in 2002, the "childhood scheduler" enables parents to create a personalized immunization schedule for their children; the program is updated promptly as immunization recommendations change. In 2004, the program results were revised for easier reading and printing, and parents reported their approval of the changes through NIPINFO.
- Vaccine Quiz for Adolescents and Adults. Added to the NIP website in 2004, the Vaccine Quiz is an interactive web page that helps adolescents and adults understand which vaccines they need. Quick and easy to use, the quiz provides a list of suggested vaccines based on responses to quiz questions. Those who take the quiz are encouraged to discuss the results with a healthcare professional to determine which vaccines are appropriate for them.

Improving Immunization Website Resources

NIP has taken steps to ensure that healthcare professionals and the public can easily find information on popular immunization sites. NIP sponsored and conducted a usability test of the Immunization Action Coalition (IAC) website. which reports 1.2 million visits per year. Over a three-month period, NIP staff members worked closely with IAC staff to plan, design, and conduct the study, which included nurses, one of IAC's key audiences. Fifteen participants evaluated the site; most were recruited at the American College of Nurse Practitioner's meeting in October 2004 in Philadelphia, Pennsylvania. The test provided ample data to illustrate the strengths and problems of the site. After analyzing the results, NIP staff prepared a comprehensive set of recommendations to guide IAC in improving its website.

Other Avenues for Education and Communication

National Immunization Program Traveling Exhibit

NIP exhibits at national and regional conferences to inform healthcare providers and consumers about immunization recommendations, policies, resources, and scientific findings. Through this exhibit, NIP promotes its website, publications, training

programs, and many other immunization resources. The exhibit offers brochures about immunization topics, CD-ROMs with current immunization information, and pocket-sized, laminated immunization schedules. In 2004, NIP's exhibit reached more than 3,200 individuals at 16 meetings and conferences such as the American Nurses Association, American Pharmacists Association, and the American College of Physicians.

Print and Electronic Publications

The National Immunization Program publishes immunization materials in both print and electronic formats. Materials can be requested by phone, fax, mail, and e-mail, and many can be accessed directly from the NIP website. Many materials are also available through the NIP online ordering system at www.cdc.gov/nip/publications. Materials include

- Fact sheets, brochures, and question-andanswer documents on subjects such as immunization recommendations, vaccine safety, registries, and the Vaccines for Children (VFC) program.
- Reference books and materials, such as the Surveillance of Vaccine-Preventable Diseases manual and the Epidemiology and Prevention of Vaccine-Preventable Diseases (better known as the "Pink Book"). A major public health immunization reference, the Pink Book is available in an annually updated print version.

The electronic version, available for download from the NIP website, is updated continuously.

- Patient education materials on current topics, including vaccine information statements (VISs), Parents Guide to Childhood Immunization, and a variety of materials that address vaccine recommendations, vaccine safety issues, and childhood and adult immunizations concerns.
- Video tapes of immunization-related training for healthcare providers.
- Computer-based and web-based self-study courses.
- CD-ROMs for healthcare provider education.

Each year, the NIP Resource and Information Center distributes a wide variety of publications and resources. Highlights for 2004 include the distribution of 596,300 printed items, 27,200 CD-ROMs, and 9,775 VHS videotapes. Particularly popular were the Immunization Works CD (21,588 copies), VIS Booklet (for providers—55,375 copies), the Parents Guide to Childhood Immunization booklet (49,760 copies), and 2,790 copies of the videotape How to Protect Your Vaccine Supply. The center also refers inquiries to appropriate personnel and organizations, processes about 800 online orders each month, and manages the supply of materials requested from the center.

Healthcare Provider Education

The National Immunization Program offers healthcare provider training and education through a variety of media, including self-study and instructor-led satellite, Internet, and land-based courses, speaker presentations, and grand rounds. In addition, NIP presents immunization modules in medical residency programs and medical and nursing school curricula. In 2004, NIP staff delivered 80 in-person presentations in 29 states to 11,914 participants. Other training included three land-based courses, five satellite broadcasts, and five NetConferences (webcasts with telephone conferencing).

Most NIP training and education activities offer continuing education (CE) credit. Types of credit awarded include Continuing Medical Education (CME), Continuing Nursing Education (CNE), Continuing Education Units (CEU), and Continuing Education Contact Hours (CECH) for health educators. In 2004, an estimated 55,000 healthcare providers

participated in distance-learning activities. Approximately 25,000 healthcare providers were awarded CE credit for participation in NIP programs. NIP continued to work with the American Pharmacists Association (APhA) to offer continuing education credit to pharmacists. Slightly more than 1,000 pharmacists were awarded CE credit for participation in NIP programs.

NIP also sponsors conferences and meetings to support immunization education for healthcare professionals. In 2004, NIP sponsored 4 major conferences and about 25 smaller meetings, enabling public and private sector healthcare professionals from around the globe to share ideas, programs, policies, research, and new technologies in immunization.

NIP-Sponsored Events in Healthcare Education

National Immunization Conference

The 2004 National Immunization Conference was held in Nashville, Tennessee at the spectacular Gaylord Opryland Resort and Convention Center. Co-sponsored by the Centers for Medicare and Medicaid Services (CMS), the CDC Foundation, and the Task Force for Child Survival and Development, the conference focused on immunization policy, outreach for underserved populations, adult and adolescent immunization, vaccine safety, and immunization programs. Nearly 1,500 people attended. Dr. Walter Orenstein, former director of the National Immunization Program, was the featured speaker at the seventh annual Jeryl Lynn Hilleman Endowed Lecture. Participants could choose from 101 workshops and 66 poster presentations, and 472 participants earned continuing education (CE) credit.

National Immunization Registry/Immunization Information Systems Conference

The 2004 Immunization Registry Conference was held in Atlanta, Georgia. Attendees shared information about programs and technologies for immunization information systems. About 420 community, state, federal, and private-sector immunization partners from across the U.S. gathered to build support for registries, share the latest immunization recommendations. and expand immunization programs. Attendees also learned about the use of information technology to identify children who need vaccinations and ways to increase childhood and adult immunization rates. This conference also offered a networking session to introduce participants to colleagues from other locales and disciplines.

National Conference on Immunization Coalitions

The Sixth National Conference on Immunization Coalitions was held September 20-22, 2004 in Norfolk, Va. and was hosted by the Center for Pediatric Research Consortium for Infant & Child Health (CINCH) and Project Immunize Virginia (PIV). Conference workshops provided direction for both new and established coalitions. Three pre-conference workshops covered funding, capacity building, and developing easy-to-read materials; the main conference offered four plenary sessions and thirty concurrent workshops for building skills or disseminating coalition strategies and programs. The 314 conference participants represented 43 states, Guam, Canada, and South Korea; at least 25% were first-time attendees.

International Neonatal Vaccination Workshop

The first International Neonatal Vaccination Workshop was held March 2–4, 2004 in McLean, Virginia. This conference examined the feasibility and safety of strategies to

expand protection of infants against vaccinepreventable diseases; strategies include the use of a variety of viral agents and vaccines such as diphtheria-tetanus-pertussis, Haemophilus influenzae type b, and pneumococcus vaccines. The 179 attendees at this meeting, mostly scientists and researchers, were drawn from more than 10 countries and represented academia, the National Institutes of Health, the Food and Drug Administration, CDC, and vaccine manufacturers.

Education Efforts to Fight Flu

To help the nation prepare for the 2004–05 flu season, NIP developed print and electronic materials, provided web-based and telephone communications, and conducted in-person and distributed training. Highlights include:

- NetConference seminar series, including 2
 "Current Issues in Immunization" sessions
 to address the influenza vaccine shortage,
 and a special November NetConference
 session for the latest ACIP
 recommendations
- Sharply increased volume of NIPINFO inquiries and responses (in October 2004,

- NIPINFO received up to 40% messages than the 2004 monthly average)
- Extension of service hours for the National Immunization Hotline (in October 2004, hotline staff expanded operating hours to 24 hours per day, 7 days per week)
- Release of an interim Vaccine Information Statement (VIS) titled "Inactivated Influenza Vaccine 2004–2005 Supplement Vaccine Shortage"
- Conducting 24 in-person presentations about flu vaccine and the vaccine shortage
- Distributing 650 CD-ROMs with printable posters, brochures, and other promotional and education materials for the 2004–2005 flu season
- Revising question-and-answer documents for healthcare professionals and for the public



Success Story

Education Success: NETCONFERENCE

The National Immunization Program has adopted a new technology to enhance audience participation and attract new audiences for immunization education programs. This technology, "NetConference," combines live, online visual presentations with simultaneous audio transmission through a telephone line. These one-hour "seminars" include live question-and-answer sessions. Audience members watch the presentations on computer screens, listen over a telephone line, and call in questions and comments. These presentations are scheduled four times each year.

In 2004 NIP staff produced five "Current Issues in Immunization" NetConferences to cover topics such as vaccine storage and handling, varicella vaccine, and pneumococcal conjugate vaccine (PCV7). The same technology was used to deliver training and influenza-related information during the 2004 influenza vaccine shortage. Since January 2004, 6,547 participants have registered for NetConference attendance and 1,645 registered participants have received continuing education (CD) credit. NIP holds the Department of Health and Human Services record for attendance using NetConference technology.

NEW TRAINING & EDUCATION PRODUCTS AND IMMUNIZATION RESOURCES

Smallpox Vaccine Storage and Handling

During 2004, NIP released an interactive web-based training course titled "Smallpox Vaccine Storage and Handling." This self-paced self-study course consists of four modules that cover proper storage, handling, and shipping of smallpox vaccine by healthcare providers and support the national emergency preparedness response to bioterrorism events. The course offers continuing education credits for participants from many healthcare professions, based on 2.75 hours of instruction.

How to Protect Your Vaccine Supply

Using real-life examples, this video provides information about acceptable vaccine storage conditions, temperature monitoring equipment, required documentation and record keeping, basic handling procedures for routinely recommended live and inactivated vaccines, and steps to take when problems occur. This video is available in both VCR and DVD format and as a webcast.

Immunization Practice Toolkit

This toolkit provides easy "one-stop" access to important immunization resources. Suitable for either experienced professionals or new staff, the toolkit offers information about clinic operations, vaccine storage and handling, client education, vaccine administration, vaccine safety, and more. Materials include websites, videos, textbooks and other print publications, reference charts, and forms. The toolkit can be reached from the healthcare professional page of the NIP website, under the heading "Resources" (www.cdc.gov/nip/home-hep.htm). The toolkit is also available in CD-ROM format by sending an e-mail to NIPINFO@cdc.gov.

Audio Vaccine Information Statements

In response to requests from healthcare providers, NIP has produced audio versions of 12 commonly requested vaccine information statements (VISs). They are available for direct download on the NIP website at www.cdc.gov/nip/publications/VIS/default.htm#audio. The audio-format VISs can also be ordered on CD-ROM by sending an e-mail to NIPINFO@cdc.gov/nip/publications/VIS/default.htm#audio. The audio-format VISs can also be



STOP!

If you are 65 or older

STOP!



GUIDE TO CONTRAINDICATIONS TO **VACCINATIONS**

Department of Health & Human Services nters for Disease Control and Prevent



Parents Guide to Childhood **Immunization**



CDC

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

gripe

Evita la muerte a causa de la gripe.

Evita que se enferme de gravedad.

Cada año, la gripe hospitaliza a cerca de 114,000 personas en Estados Unidos. Los niños menores de 2 años y las personas mayores de 65 años tienen la misma probabilidad de ser hospitalizados.

Protege a otras

Usted se debe vacunar si vive o cuida de alguien con mayor riesgo de sufrir complicaciones a causa de la gripe. Si usted se vacuna contra la gripe, protege a su familia, incluyendo a niños pequeños y las personas mayores.



NFORMATION TATEMENTS NEED TO KNOW

- · How to use VISs
- Where to find them Translations
- Record keeping requirements
- · VIS law
- · VIS Instruction Sheet
- Copies of Current VISs

DEPARTMENT OF HEALTH AND HUMAN SERVICES

NIP provides posters, brochures, flyers, table tents, booklets, CDs. videos and textbooks for immunization education.

Establishing Partnerships and Fostering Collaboration

The National Immunization Program (NIP) works with local, state, national, and international partner organizations to increase awareness of immunization recommendations, foster the development and implementation of effective immunization programs, and achieve high immunization coverage levels. Effective strategies for delivering and evaluating immunization services include use of immunization information systems (including immunization registries), regular audits of immunization records, and collaborating to reach under-immunized populations. The National Immunization Program also develops partnerships with community organizations and private healthcare providers to increase awareness of immunization recommendations and the use of "best practices."

Federal, State, and Community Support

NIP brings together many partners to coordinate vaccine policies and initiatives. Achieving our nation's immunization goals depends upon collaboration among professional organizations, state and federal public health agencies, vaccine manufacturers, and other healthcare provider and community partners. These joint efforts span each phase of vaccine development and delivery.

Immunization Grant Funds

Federal funding for the Immunization Grant Program (also called the "Section 317 grant program") began in 1963. In 2003, the National Immunization Program administered \$387.4 million in federal grants to 64 state, local, and territorial public health agencies for program operations and purchase of vaccines not covered by the Vaccines for Children Program (VFC). An additional \$977 million was provided to the state, local, and territorial public health agencies through the VFC program. Under the VFC program, publicly purchased vaccines are provided to public and private healthcare providers for administration to eligible children at no charge.

State, territorial, and local immunization programs use these federal funds to purchase vaccines. Section 317 funds also help to maintain an immunization infrastructure to assure service delivery, conduct surveillance of vaccine coverage and safety, and sustain and improve vaccination levels. Immunization grantees receive technical assistance through site visits and routine communications from program consultants at NIP.

Cooperative Agreements

NIP collaborates with healthcare provider organizations, national minority organizations, and coalition groups to promote immunization. Partnerships with these groups are instrumental in educating healthcare providers, parents, and consumers about immunization recommendations and in addressing vaccine safety concerns. Working with national minority organizations and coalition groups has enhanced understanding of specific needs and has enabled the development of appropriate messages for special populations, including those at high risk of vaccine-preventable diseases. Through healthcare provider cooperative agreements, NIP has increased provider education and standardized immunization policies and practices.

In 2004, NIP has enhanced communications with existing partners and forged relationships with new partners. During the past year, NIP awarded new cooperative agreements to five organizations. The first set of awards supports coalition building and information dissemination activities for two organizations.

The Academy for Educational Development (AED) will conduct a needs assessment of coalitions and will develop training for coalition members.

The Immunization Action Coalition (IAC) will support websites, maintain electronic mailing lists and discussion groups, and publish immunization newsletters.

The second set of awards supports activities in minority communities. The three awardees—The National Asian Women's Health Organization (NAWHO), the Black Women's Health Imperative (BWHI), and The Migrant Clinicians Network (MCN)—will educate healthcare providers about cultural barriers to immunization and will create and distribute linguistically appropriate, culturally sensitive immunization materials to public audiences.

Encouraging collaboration is an important aspect of NIP's work with partners and grantees. Sharing information helps keep partners current about immunization and reduces duplication of effort. NIP partners receive regular updates and enjoy opportunities to share information and ideas. During the February 2004 reverse-site visit in Atlanta, grantees gathered at CDC to learn more about one another's projects. The agenda included informal and formal discussions, a roundtable, and training about grantee projects. Training sessions provided additional opportunities to learn from and work with fellow attendees. For example, grantees developed step-bystep evaluations for project activities. This same kind of collaboration occurs during the monthly conference calls that NIP conducts for current and former grantees. Partners are also invited to contribute articles to NIP's monthly e-newsletter, Immunization Works, which is distributed to more than 125 organizations.

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Partner Communication Program (PCP)

NIP also offers the Partner Communication Program (PCP) to help health departments and national organizations communicate about immunization issues in the United States. Currently PCP comprises 131 partner organizations whose membership includes physicians, nurses, other healthcare professionals, policy makers, and representatives of special-interest and minority groups.

PCP supports both the *Immunization Works* newsletter and the Important Information and Emergency Communication Program, enabling rapid communication about issues with immediate impact for consumers and healthcare providers. News and information about vaccine shortages, disease outbreaks, and other urgent situations that cannot be covered effectively by the newsletter are distributed through these channels. In 2004, PCP disseminated six important information bulletins and one emergency communication message. The monthly newsletter informs the public, healthcare providers, and others about immunization events and developments. Messages prepared by PCP for this publication reach approximately 300 subscribers who share this information with constituents. The *Immunization Works* newsletter is available on the NIP website at www.cdc.gov/nip/news/newsltrs/imwrks/imwrks.htm.

Partnering with Faith-Based Organizations

NIP is enhancing its efforts to partner with faith-based organizations that conduct immunization activities. These partnership opportunities include supporting cooperative agreements with national minority groups and community-based organizations. NIP's current activities involve

- Participating in the Department of Health and Human Services (HHS) efforts to support the White House Faith-Based and Community Initiatives
- Ensuring that its program announcements incorporate HHS guidelines for working with community-based organizations, national minority organizations, and national faith-based organizations
- Promoting opportunities to partner with NIP and other CDC centers at faith-based conferences
- Responding to requests for information about NIP programs and efforts to enhance its partnerships with faith-based organizations